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EXAMINER

SHINGLETON, MICHAEL B

ART UNIT	PAPER NUMBER
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2815

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10/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,532	Applicant(s) DEKKER ET AL.	
	Examiner Michael B. Shingleton	Art Unit 2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 2,8,10,12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-7, 9, and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

It is noted that the present application has claims that have been withdrawn. The office action dated 3-29-2007 from the previous examiner first indicated that claims 2, 8, 10, 12 and 13 are withdrawn. However, the present examiner does not see any restriction requirement or any reason why these claims were withdrawn. Thus, it is assumed that applicant withdrew these claim voluntary without reason before the office action dated 3-29-2007 and accordingly these claims continue to be held withdrawn.

Specification

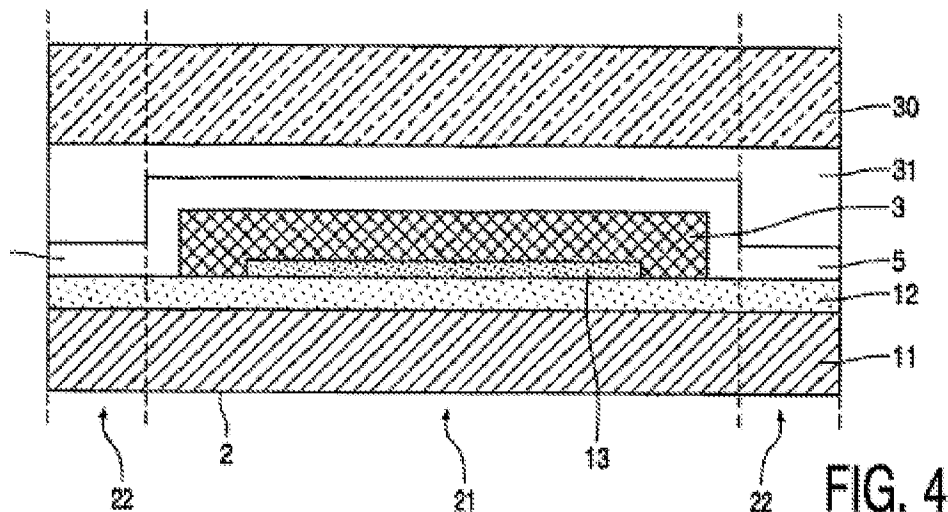
35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

The following lists some examples but are not to be considered the only examples in the specification. As stated above the specification is "replete" with problems that are just too numerous to mention specifically.

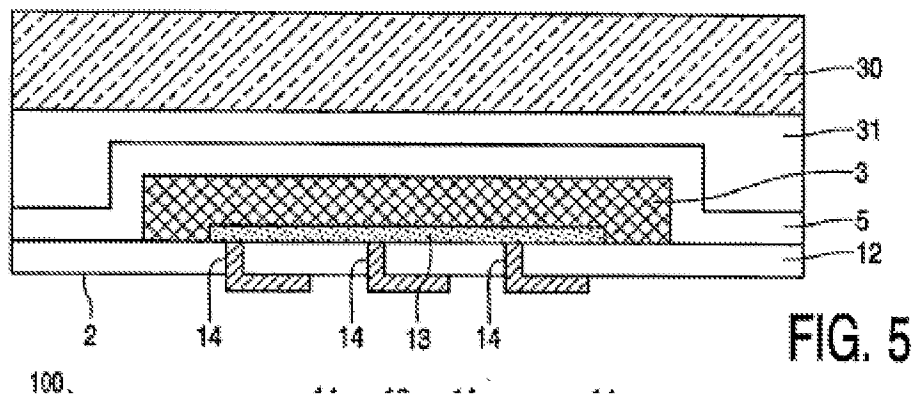
1. Page 8 of the specification states:

The thinning of the substrate is done in two steps, in the first of which the base layer 13 is grinded, after which it is etched with a KOH solution. Herein the oxidic layer 12 acts as an etch-stop layer.

2/2



Above is Figure 4 of the instant application.



Above is Figure 5 of the instant application.

The specification clearly is not written in "full, clear, concise, and exact terms" as required by 35 USC 112 first paragraph because with the base layer 13 being covered by layer 3 and layer 12 such that no part of layer 13 is exposed as shown in Figure 4 how can the base layer 13 be grinded as required by the original disclosure??? Figure 5 showing the result after the grinding of the base layer 13 shows that base layer 13 is not grinded.

2. It is noted that applicant has refused in the response dated 6-18-2007 to provide section headings as suggested by the previous examiner. Therefore the entire specification is the detailed description of the invention. In the Office action dated 4-14-2008, the examiner noted that "a functional layer being present on the second side of the insulating layer" is not shown in the drawings. In the Office action dated 3-29-2007 the examiner noted that "the functional layer is considered vague and undefined". In the response dated 6-18-2007 applicant says that the "functional layer are discussed at paragraph 8" (sic).

The MPEP 608.01(g) clearly states that within the detailed description of the invention that the "reference characters must be properly applied" and that no single reference character is to be used for two different parts. As noted in the above reproduction of paragraph 8 of the original disclosure reference characters were not applied at all in any shape or form and thus applicant has not complied with MPEP 608.01(g) for reference characters must be properly applied. The examiner also notes that apparently applicant still has not provided an amendment that properly applies the reference characters to paragraph

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8 and many other paragraphs that constitutes the detailed description of the invention. Clearly, applicant has presented a specification that is not written in "full, clear, concise, and exact terms" in order to comply with 35 U.S.C. 112, first paragraph and this has lead to great confusion as clearly indicated by the previous office actions made by the previous examiner. Also again clearly not providing the reference characters in the detailed description of the invention fails to comply with the requirement in MPEP 608.01(g) that requires reference characters must be properly applied and failure to do so could result in the abandonment of the application. 35 USC 113 also states that "The applicant shall furnish a drawing where necessary for the understanding of the subject matter to be patented" (See MPEP 608.02). The whole idea is that elements described in the specification are referenced by letters/numbers etc. to the drawings so that the necessary understanding of the subject matter to be patented can be had. Drawings in this case are clearly necessary for the understanding of the subject matter to be patented and for the understanding of the invention as a whole. Applicant has greatly failed on this account as noted above and below and accordingly has not provided a specification that is written in "full, clear, concise, and exact terms" as required by 35 USC 112 first paragraph. Another example is the term "substrate" like it appears on page 1 of the detailed description of the invention. No reference number/character is provided for the term "substrate" so that a specification written in "full, clear, concise, and exact terms" results. The following list attempts to list most if not all elements that do not have reference characters properly applied in the detailed description of the invention as required by MPEP 608.01(g) and 35 USC 112 first paragraph so that the necessary understanding of the invention can be had and a specification that is written in "full, clear, concise, and exact terms" occurs. Note on pages 1-6 of the detailed description of the invention, reference characters are not properly applied at all and must be properly applied in response to this office action for the following terms: the "insulating layer", the "active layer", the "first aperture", the "first side", the "second side", the "active layer", the "flexible coating", the "substrate", the "switching elements", the "island", the "carrier substrate", the "integrate" circuit elements", the "base layer", the "oxide layer", the "adhesion agent", the "glue", the "bond pads", the "carrier substrate", the "functional layer", the "flexfoil", the "high-K dielectric layers", the "antennas", the "ferroelectric layers", the "capacitors", the "sensors", the "peptides", the "proteins", the "biological material", the "electro-optical layer", the "inorganic electroluminescent layers", the "polymeric electroluminescent layers", the "liquid crystal layers", the "pixel electrode", the "glass substrate", the "thin film transistors", the "source and drain electrodes", the "foil", the "hole injection layer", the "further electrode layer", the "pixel electrode", the "active matrix liquid crystal display", the "low-K area", the "integrate" circuit of circuit elements", the "driving circuit", the "seed layer", the "barrier layer", the "provisional substrate", the "mesa substrate",

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the "buried oxide layer", the "area of identification and security", the "oxidic layer", the "paper substrate", and the "another carrier substrate".

Also noted above "no single reference character is to be used for two different parts" and the following represents exemplary example of such in the original disclosure. Note that the "base layer" is given the reference number "13" yet in the amendment dated 6-16-2008 applicant wants to add a paragraph that recites reference number 13 as a "functional layer". Which is it? Is it a base layer or a functional layer? Is the base layer and the functional layer two different structures or are they the same structure? Naming an element for example element 13 with different names implies different structures and even in the case where they are not different structures, the applying of different names for the same element is absolutely not providing a specification that is written in "full, clear, concise, and exact terms" as required by 35 USC 112 first paragraph. It just leads to confusion. A specification simply cannot be concise where the terms therein are inconsistent. A specification simply cannot be clear where terms therein are inconsistent. A specification simply cannot be exact when the terms therein are inconsistent and thus not exact.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following must be shown or the feature(s) canceled from the claim(s).

1. The drawings do not show "the first electrode" in the active layer as is set forth by at least claim 1. As shown in the original disclosure and original Figures 1-6 the active layer 11 is totally removed in the final product (Figures 5 and 6) and also from the original disclosure and original drawings the active layer 11 is totally removed before any apertures like 14 are formed in the oxidic layer 12. Thus the electrode material formed in the aperture 14 that extends on the side opposite base layer 13 cannot and is not the first electrode. Newly proposed Figure 7 has the "lower" electrode 50 listed in the proposed amendment to the specification as "another electrode". There is no indication that "another electrode" is the "first electrode" as set forth by the claims.

2. Original claim 2 recites that "a flexible coating acting as a protective cover for the at least one switching element that is present at the second side of the insulating layer". Thus the original disclosure has support for such, but unfortunately this is not shown in the original drawings nor the newly presented drawings. There are many problems that exist in the present application and one is the inconsistent use of terms etc. as noted above and the inconsistent use of terminology in the claims that is apparently different from that used in the specification. For example the element 3 is recited and named as just "coating" in

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the specification and at least some of the claims recites the term “flexible coating”. The composition of element 3 is a polyamide resin material and thus apparently this is what applicant means by “flexible coating” in the claims. Note that even in newly presented Figure 7 that the switching elements 40a and 40b do not have a flexible coating acting as a protective cover. Polyamide resin coating 3 covers 13, but does not cover 40a and 40b in newly presented Figure 7.

3. The "electrically conductive layer present between the active layer and the functional layer" (clm. 4). Note that newly presented Figure 7 and the associated amendment to the specification presents a conductive layer that is within the layer 12 and this is clearly new matter which must be cancelled in response to this office action and thus this means that after the cancellation of this matter that there is still no showing of this conductive layer in the drawings.

4. The capacitor (clm. 5). Note that without a proper showing of the conductive layer (clm. 4) there is no showing of the capacitor.

5. There is still no array of switching elements shown (clm. 7).

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because there are two different parts shown in newly presented Figure 7 that have the character “50” (Note the upper and lower number 50’s.). Different parts cannot have the same reference number See MPEP 608.02 and 37 CFR 1.84. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should

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include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

New Matter

The amendment filed 7-18-2008 and first presented 6-16-2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Newly presented Figure 7 and the associated amendment to the specification are not supported by the original disclosure. Note that the electrically conductive layer that is present between the active layer and the functional layer in which conductive layer a pixel electrode is defined (Original claim 4) is not described or shown by the original disclosure as a layer that is within the layer 12. The element 42 and description thereof in the newly presented amendment to the specification and in newly presented Figure 7 has this layer "42" within the layer 12 and this introduces new matter into the specification. Also note that the original disclosure does not describe or show switching elements in direct contact with each other as is shown by the newly presented Figure 7 and described by the associated amendment to the specification describing newly presented Figure 7 and this introduces new matter into the specification. Also there is no original description support for an electrically conductive path directly below the display pixel and through to the layer 11 which introduces new matter into the specification. The apertures 14 are only formed after the layer 11 is completely removed. This should further emphasize that there is no support for an electrically conductive path directly below the display pixel through the layer 12 and contacting the layer 11 as the original disclosure only teaches forming electrically conductive paths through the layer 12 only after the layer 11 has been completely removed.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. US 2002/0050599 (Lee).

The reasoning of the office dated 4-14-2008 involving the rejection of claims 1 and 3-5 under Lee is hereby repeated in this office action and accordingly applicant is referred to the office action dated for details thereof. The present examiner agrees with the same reasoning as presented by the previous examiner in the office action dated 4-14-2008 except for the flexible coating limitation. This change of position involving the flexible coating is because of applicant's amendment made to claim 1. As noted above the layer 3 does not cover the at least one switching element if the at least one switching element is formed in the layer 11. Therefore the upper substrate 9 of Lee being flexible and formed on the second side is every much a protective cover for the at least one switching element as layer 3 is for applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-7 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Murade US 6,750,924 (Murade) and in further view of Lee.

The reasoning of the office dated 4-14-2008 involving the rejection of claims 1, 3-5, 7 and 9 under Lee is hereby repeated in this office action and accordingly applicant is referred to the office action dated for details thereof. The present examiner agrees with the same reasoning as presented by the previous examiner in the office action dated 4-14-2008 except for the flexible coating limitation. This change of position involving the flexible coating is because of applicant's amendment made to claim 1. As noted above the layer 3 of the instant application does not cover the at least one switching element if the at least one switching element is formed in the layer 11. Therefore the upper substrate of Murage being flexible and formed on the second side is every much a protective cover for the at least one switching element as layer 3 is for applicant.

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With respect to claim 6 here applicant recites that the insulating layer is provided with a high-k area. What exactly is "high-K" is unclear. Accordingly, the insulating layer is considered to be of high-k material and thus anticipates this limitation. However, alternatively clearly Murade is not to be limited to but a single example of material for the insulating layer, other conventional insulating materials especially of high-k can be used as these are art recognized equivalents.

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the insulating layer material of Murade with High-k material as such material is an art recognized equivalent to that of Murade and the higher the K the less material needed to make a capacitance of the same value as compared to a lower k material.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murade (and Lee) and in further view of E Ink Corp (WO 02/073572) (E ink).

Applicant is referred to the reasoning as presented in the Office action 4-14-2008 concerning this claim 11 as such reasoning applies here.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Shingleton whose telephone number is (571) 272-1770.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Parker, can be reached on (571) 272-2298. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MBS
Sept. 11, 2008

/Michael B. Shingleton/
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Primary Examiner
Group Art Unit 2815

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